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10/566,003

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EXAMINER

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/566,003	<b>Applicant(s)</b> OOSTVEEN ET AL.	
	<b>Examiner</b> Trang U. Tran	<b>Art Unit</b> 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 June 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-13 and 22-27 is/are allowed.
- 6) ☒ Claim(s) 1-7, 14-21, 28 and 29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed June 01, 2010 have been fully considered but they are not persuasive.

In re pages 13-14, applicant argues that nowhere in Crockett it is shown or suggested that the segment of the signal to which a fingerprint is generated is unambiguously related with a synchronization time point.

In response, the examiner respectfully disagrees. Crockett et al discloses in page 4, paragraph #0037 that

“The first substep calculates the spectral content of successive time segments of the audio signal. In a practical embodiment, described below....The locations of event boundaries are stored as a signature. An optional process step 2-4 (“Identify dominant subband”) uses the spectral analysis to identify a dominant frequency subband that may also be stored as part of the signature.”

From the above passage, it is clear that Crockett discloses the claimed deriving fingerprint on the basis of a segment of video signal and is unambiguously related with a synchronization time point.

In re pages 14-15, applicant hereby traverse the apparent reliance on Official Notice and requests that the Official Notice in this matter be supported by documentary evidence and, without the proffer of such documentary evidence, it is submitted that the present Office Action fails to state a prima facie case of obviousness under 35 U.S.C. § 103.

In response, attached herein is the support documentary evidence to support the Official Notice of claims 6 and 20-21. Reynolds et al (US patent No. 4,885,785 A)

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discloses in col. 7, lines 4-22 that the CPU is connected to RAM and ROM. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the CPU with RAM and ROM as taught by Reynolds et al into Crockett's system for the reasons as discussed in the last Office Action.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-5, 7, 14-19 and 28-29 are rejected under 35 U.S.C. 102(e) as being anticipate by Crockett et al. (US Publication No. 2004/0148159 A1).

In considering claim 1, Crockett et al discloses all the claimed subject matter, note 1) the claimed deriving a first fingerprint on the basis of a segment of the first signal, where the segment of the first signal is unambiguously related with a first synchronization time point ( $T_n$ ;  $T_{n+1}$ ) is met by the signature 1 or fingerprint 1 (Figs. 1A-1B, page 1, paragraph #0011 to page 2, paragraph #0015), 2) the claimed deriving a second fingerprint on the basis of a segment of the second signal, where the segment of the second signal is unambiguously related with a second synchronization time point ( $T_n$ ;  $T_{n+1}$ ;  $T_m$ ) is met by is met by the signature 2 or fingerprint 2 (Figs. 1A-1B, page 1, paragraph #0011 to page 2, paragraph #0015), and 3) the claimed supplying the first

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and second fingerprints to a synchronization device for synchronizing the first and the signal based on the first and second fingerprints is met by the time offset calculation 4 and the time alignment 6 (Figs. 1A-1B, page 1, paragraph #0011 to page 2, paragraph #0015).

In considering claim 2, the claimed wherein for each given synchronization time point ( $T_n$ ;  $T_{n+1}$ ;  $T_m$ ) performing at least one of: storing the derived first fingerprint in a database and storing the derived second fingerprint in the same or another database is met by the signature or fingerprint of the audio is embedded in the video signal prior to transmission or storage (Figs. 1A-1B, page 2, paragraph #0013).

In considering claim 3, the claimed wherein the first fingerprint and the second fingerprint are transmitted to the synchronization device via the Internet or via other means is met by the time offset calculation 4 and the time alignment 6 (Figs. 1A-1B, page 1, paragraph #0011 to page 2, paragraph #0015).

In considering claim 4, the claimed wherein at least one the segment of the first signal and the segment of the second signal are unambiguously related with at least one of the first and second synchronization time point ( $T_n$ ;  $T_{n+1}$ ;  $T_m$ ) according to: at least one of the segment of the first signal and the segment of the second signal ending substantially at least one of the first and second synchronization time point ( $T_n$ ;  $T_{n+1}$ ;  $T_m$ ), at least one of the segment of the first signal and the segment of the second signal starting substantially at least one of the first and second synchronization time point ( $T_n$ ;  $T_{n+1}$ ;  $T_m$ ), at least one of the segment of the first signal and the segment of the second signal starting or ending at a predetermined distance before or after the at

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least one of first and second synchronization time point ( $T_n$ ;  $T_{n+1}$ ;  $T_m$ ), or at least one of the first and second synchronization time point ( $T_n$ ;  $T_{n+1}$ ;  $T_m$ ) being at a predetermined time point between a start and an end of the segment of the at least one of the first signal and the segment of the second signal is met by both signatures or fingerprints which may be generated at the same relative timing relationship (Figs. 1A-1B, page 1, paragraph #0012 to page 2, paragraph #0015)

In considering claim 5, the claimed wherein the first ( $T_n$ ;  $T_{n+1}$ ) and second synchronization time point ( $T_n$ ;  $T_{n+1}$ ;  $T_m$ ) is the same is met by both signatures or fingerprints which may be generated at the same relative timing relationship (Figs. 1A-1B, page 1, paragraph #0012 to page 2, paragraph #0015).

In considering claim 7, the claimed transmitting at least one of the first representation and second representation to a synchronization device, transmitting at least one of the first and second representation to a server in communications connection with a synchronization device, and transmitting the one or more derived first fingerprints and second fingerprints to the server is met by both signatures or fingerprints which may be generated at the same relative timing relationship (Figs. 1A-1B, page 1, paragraph #0012 to page 2, paragraph #0015).

In considering claim 14, the claimed wherein said first signal is an audio signal, said second signal is a video signal, said first fingerprint is an audio fingerprint, and said second fingerprint is a video fingerprint is met by the signature or fingerprint of the audio is embedded in the video signal prior to transmission or storage and the signatures 1

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and 2 or fingerprints 1 and 2 (Figs. 1A-1B, page 1, paragraph #0012 to page 2, paragraph #0015).

Claims 15-19 are rejected for the same reason as discussed in claims 1-5, respectively.

Claim 28 is rejected for the same reason as discussed in claim 14 above.

Claim 29 is rejected for the same reason as discussed in claim 1 above.

***Claim Rejections – 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section discloses all the claimed subject matter, note 1) the claimed of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 6 and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crockett et al. (US Publication No. 2004/0148159 A1).

In considering claim 6, Crockett et al disclose all the limitations of the instant invention as discussed in claim 1 above, except for providing the claimed wherein the first synchronization time point ( $T_n$ ;  $T_{n+1}$ ) is different from the second synchronization time point ( $T_n$ ;  $T_{n+1}$ ;  $T_m$ ) and in that the method further comprises storing a first representation of a relationship between the first synchronization time point ( $T_n$ ;  $T_{n+1}$ ) and a first time point of a reference time and storing a second representation of a relationship between the second synchronization time point ( $T_n$ ;  $T_{n+1}$ ;  $T_m$ ) and a second time point of said reference time. The capability using of the first

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synchronization time point ( $T_n$ ;  $T_{n+1}$ ) is different from the second synchronization time point ( $T_n$ ;  $T_{n+1}$ ;  $T_m$ ) and in that the method comprises the step of storing a first representation of a relationship between the first synchronization time point ( $T_n$ ;  $T_{n+1}$ ) and a first time point of a reference time and storing a second representation of a relationship between the second synchronization time point ( $T_n$ ;  $T_{n+1}$ ;  $T_m$ ) and a second time point of said reference time is old and well known in the art. Therefore, the Official Notice is taken. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention to incorporate the old and well known using of the first synchronization time point ( $T_n$ ;  $T_{n+1}$ ) is different from the second synchronization time point ( $T_n$ ;  $T_{n+1}$ ;  $T_m$ ) and in that the method comprises the step of storing a first representation of a relationship between the first synchronization time point ( $T_n$ ;  $T_{n+1}$ ) and a first time point of a reference time and storing a second representation of a relationship between the second synchronization time point ( $T_n$ ;  $T_{n+1}$ ;  $T_m$ ) and a second time point of said reference time into Crockett et al's system in order to provide a fast and accurate method of time aligning two audio and video signals.

Claim 20 is rejected for the same reason as discussed in claim 6 above.

In considering claim 21, the claimed a transmitter for transmitting at least one of the first and second representation to a synchronization device, a transmitter for transmitting at least of the first and second representation to a server in communications connection with a synchronization device, and a transmitter for transmitting the one or more derived first fingerprints and second fingerprints to the server is met by both signatures or fingerprints which may be generated at the same



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relative timing relationship (Figs. 1A-1B, page 1, paragraph #0012 to page 2, paragraph #0015 of Crockett et al).

***Allowable Subject Matter***

6. Claims 8-13 and 22-27 are allowed.

The independent claims 8 and 22 identifies the uniquely distinct features:

“generating a second fingerprint stream on the basis of a second signal, comparing a segment of the first fingerprint stream with one or more first fingerprints stored in at least one database in order to determine if a match exists or not, comparing a segment of the second fingerprint stream with one or more second fingerprints stored in the at least database in order to determine if a match exists or not, and if a match exists for both a first and a second fingerprint determining a location of a first synchronization time point ( $T_n, T_{n+1}$ ) for the first signal and a location of a second synchronization time point ( $T_n, T_{n+1}; T_m$ ) for the second signal and synchronizing the first and the second signal using the determined locations”. All the references of record, either singularly or in combination, fail to anticipate or render the above underlined limitations obvious.

***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trang U. Tran whose telephone number is (571) 272-7358. The examiner can normally be reached on 9:00 AM - 6:30 PM, Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lin Ye can be reached on (571) 272-7372. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

August 15, 2010

/Trang U. Tran/  
Primary Examiner, Art Unit 2622

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